3:Watson E-4,5 (1943) 1952 SM4 Guarani SM4

THE PHYSICAL SETTING

The zones in which the Cayuá of Brazil live, including those of Taquapiri, can be divided roughly into three types according to plant cover. The first, which is called *campo cerrado*, or simply *cerrado*, is described as "a savanna with scattered thickets of deciduous scrub forest."[37] The trees are usually small, gnarled and twisted, and often widely enough scattered and open so that grasses fit for grazing grow among them. Indeed, the vagrant cattle of the region graze in this type of terrain as well as in the *campo limpo* or *chapadão*. Here one refers to the open expanses of grasslands which largely follow the divide between the waters of the Paraná and Paraguay rivers, south from the town of Campo Grande to the Paraguayan frontier. Smaller stretches of grasslands are scattered among the *cerrados* and the *matas* (forests), the latter being the third type of vegetation which characterizes the Cayuá country.

The *matas* are composed of enormous trees, including the *perobas*, *cedras*, and other great hardwoods, and close growing vegetation; it is impossible to confuse the *mata* with the *cerrado* type of country. The *matas* are usually dense, and the trees are high enough so that one is out of the sun during the day and has a feeling of cool darkness. It is with the *matas* that we shall be primarily concerned in considering the Cayuá. The forest is their home par excellence, and their feeling of ease in it finds expression in many interesting ways.

As for the soils, as James[38] suggests, "the various kinds of grass-forest mixture have an important bearing on the physical quality of the land and its potential value for agricultural settlement." This principle is tacitly recognized by the Indians. For the Cayuá of Taquapiri the only soils worth farming are, in the first place, soils within the *mato*,[39] and, secondly, *mato* soils in which certain kinds of growth have developed, notably *taquara* (a type of bamboo) and a certain type of fern (*omambaí*). In the immediate neighborhood of Taquapiri the *campo* and *cerrado* soils are generally light colored, sandy, and probably poor, while the *mato* soils are usually reddish, with considerable humus, and richer.

The location of the Cayuá in Mato Grosso and neighboring Paraguay is almost exclusively on the Rio Paraná side of the divide between that river and the Rio Paraguay. Numerous rivers large enough to be navigable drain this region into the Paraná. Two of these rivers, the Iguatemy and the Amambai, have their sources quite near to the Cayuá *colônia* of Taquapiri. Both enter

[37] James, 1942, p. 505. [38] *Ibid.*

[39] The distinction in Brazilian Portuguese between *mata* and *mato* is not very clear to the writer, but the former seems to refer more to a specific forest and the latter in general to forested or wooded country.

3:Watson E-4,5 (1943) 1952 SM4 Guarani SM4

133 the immense Rio Paraná some distance above its spectacular plunge over the great escarpment at Sete Quedas.

According to the meager data available on the topography of the region, the Cayuá of Mato Grosso live on plains and hilly uplands, varying between
132 some 1,000 to 1,500 feet above sea level. The climate is not often disagreeable, even for the newcomer, and has stimulating features.[20] It is characterised by a wet and a dry season. The dry season comes in the winter months, and its height is about July. For a few days during these months, although it does not snow (for lack of moisture), it is often bitterly cold, especially for the type of habitation and clothing common in the area to Indian and white alike. Occasionally in the morning the ground is covered with hoar frost. At the height of the rainy season, in December and January, the rain sometimes falls so fast that it is not readily soaked up by the ground; ponds are quickly formed in the low places, and roaring streams overflow their banks. Water holes and bogs appear during the rainy months where only dried mud was before. The frogs and other life forms seem to burst forth simultaneously. This is the growing season for the Cayuá planter.

• 137 The more general aspects of the flora of the region have been mentioned above in speaking of the three broad types of plant cover. The many varieties of trees to be found in their environment are the most important wild flora
[411] for the Cayuá. There are woods of extreme hardness for arrow points, flexible
[342] woods for bows, straight canes for arrow shafts,[21] *maie* trees, which the Cayuá
[417] also now use on a small scale, and many types of lianas and plants with strong, fibrous cortices for tieing, especially used in building houses and
[283] fences. The *caraguatá* cactus provides a good fiber for cordage and for certain
[342] textiles. There are numerous bushes and trees bearing wild fruits, and not to be overlooked is the *taquára*—strictly *taquarusú*—a large bamboo with long, stout, straight trunks which serve the Cayuá admirably for many purposes
[262] including construction of houses, though never for fuel. The *pindó* palm provides leaves for cover, fibers for lines, and fruit, and its heart is, or was formerly, used to make an edible pounded meal.

136 The fauna of the Cayuá region include deer, *capivara*, *anta* (*Tapirus americanus*, Briss.), *paca* (*Coelogenus paca*), *coiteté* (*Tajassu tajassu*, Lin.), armadilloes, coati, and various smaller mammals. Several kinds of jaguar (from Tupi-Guarani *djaguareté*) and a wild dog, the *guará* (*Canis jubatus*), also roam the woods. Among the birds are included parrots, parroqueets, toucans (Tupi-Guarani *tukã'*), vultures, several sorts of heron, and the *arapónga* (Portuguese: *Ferreiro do mato*), a never-to-be-forgotten, dull-colored little

[20] The cold of the winter seemed to annoy our Brazilian colleagues, both from warm Rio, more than the considerable heat of the summer troubled us North Americans.

[21] One of these canes, the *taquapí* (*caña de Castilla*), gives its name to Taquapiri, the village
[103] studied.

3: Watson E-4,5 (1943) 1952 SM4 Guarani SM4

*174 226 ample, speaking of Cayuá farther down the Paraná than Taquapiri, does not give the impression that we would expect from Métraux's statement about the lack of Cayuá fishing.[46]

In any event, the Cayuá practiced fishing at least to a limited extent and knew the techniques of angling, fish poisoning, weir building, and stream damming. It must remain a question for the time being whether the present poverty of fishing techniques is recent or a matter of long standing. It is *174 likely that fishing was somewhat more important in bygone days.

224 The trapping of animals, while classifiable as a special form of hunting, was in a certain sense a meeting ground of agricultural and hunting practices. Traps, snares, and deadfalls had to be set to keep animal depredations in the planted crops at a minimum. At the same time, of course, the supply of meat *174 acquired in this manner contributed to the Cayuá larder.

222 Gathering practices, largely the responsibility of the women, played a [462] fairly important secondary part in the food economy of the Cayuá. This was primarily due to the fact that a considerable number of fructiferous trees and bushes grow in the region.[47] Among the wild plants widely used for food by the Cayuá are to be found *gwaimbé* (*Philodendron bipinnatifidum*), *jaboticába* (*Myrciaria cauliflora*), *vacuá* (*Pandanus utilis*, Bory), *gwaBiréba* (*Mirtaceæ* [252] family), *gwajuBira* (?), and *araticá* (*Rollinia exalbida*). The use of the heart [171] of the *pindó* palm (*Cocos romanzoffiana*) to make flour as well as shoots for roasting is reported; it is also known to have been a characteristic food practice of some of the non-Guarani-speaking peoples, such as the Mbayá-Caduveo. [273] One modern informant insisted that formerly certain wild fruits were used, at the proper times of the year, to make the all-important *cāuī'* or *chicha* beer. (Corn, potatoes, or manioc are traditional ingredients.)

The women also gathered yearly a certain large ant, *ysá*, when it left its house about October. Standing near the mouth of the ant houses with their feet in small, prepared water holes so as not to be bitten, they swept large [252] quantities of the insects into vessels. These would later be roasted, principally for the white fat or oil which was stored in the tail segment of each ant and which was highly esteemed for food. Certain grubs, including one called *tambú* (*Calandra palmarum*) were also eaten.

Another aspect of gathering practices was connected with the several varieties of melliferous bees which live in the Cayuá habitat. Locating hives and the systematic gathering of honey were fairly well developed practices [171] among the aboriginal Cayuá. This trait they doubtless shared with the neighboring Guarani as well as with the little known Guayaki of Paraguay, people who have been characterized as having "a honey culture." There was a

[46] Ambrosetti, 1894, pp. 701, 727 ff.

[137] [47] Apparently an even larger number of such fruit-bearing trees, including many of the same varieties, grew in the environment of the more northerly dwelling Tupi-Guarani.

/309 cont./

174 If they were under the authority of a powerful chief, the expedition
167 gained in cohesion and numbers. In no case must one see in
721 these migrations a national movement carried out according to
619 a pre-established plan and involving the whole group of Guarani tribes simultaneously. These Indians, like all in tropical America, have never had a very clear consciousness of their unity, and, even in the face of a common danger, the idea never occurred to them that similarity of language and culture might create a bond of solidarity among them. All the more reason why this individualism of the group or tribe was to manifest itself with particular acuity when a simple pillaging expedition was afoot.

174 The columns of Guarani warriors who penetrated into
721 the Chaco bush doubtless included only a few women. The
167 men advanced, walking in single file, bows and arrows in hand,
22 while several girls followed behind with baskets full of pro-
262 visions on their backs. If these ran out, the men hunted along
[411] the way or fished in the rivers, such as the Pilcomayo if they
[482] were following its course. When game or fish were lacking, they gathered fruit; palm cabbage, algarroba pods, and chañar fruit were there, which provided a substantial diet, but it was still necessary to choose the season when they were
[825] ripe, in order to travel. They watched the flight of bees in order to find honey, and they did not scorn certain insects or
167 their larvae. The problem of water was the only serious one;
721 it was solved by collecting what the caraguatá leaves held at
174 the base; they sucked the root of certain tubers (the /310/
271 sipóy (1) of the northern Chaco) and quenched their thirst at
824

• [139]

1. This is a Bignoniaceae or Begoniaceae (?). This plant has the appearance of a liana whose bulb is full of fresh water. (Diccionario Chiriguano-Español y Español-Chiriguano, p. 192).

the small ponds encountered on the way.